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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,147	05/25/2000	MARK LADLOW	58937/123	1696

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EXAMINER	
GORDON, BRIAN R	
ART UNIT	PAPER NUMBER
1743	14

DATE MAILED: 01/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/509,147	LADLOW ET AL.	
	Examiner	Art Unit	
	Brian R. Gordon	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *14 February 2002* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. In light of applicant's amendment/arguments filed October 28, 2002, the examiner hereby withdraws the previous objections to the drawings in reference to the "guide means".

2. In light of applicant's arguments, the objection to the specification as directed to the missing section headings is hereby withdrawn.

3. In light of applicant's amendment, the 112 rejection of claims 1-10 as directed to the "fixing means" is hereby withdrawn.

4. Applicant's arguments with respect to claims 1-5, 8-9, and 11-12 have been considered but are moot in view of the new ground(s) of rejection.

Specification

5. The disclosure is objected to because of the following informalities: On page 1 the last line of paragraph 3, the word "In" should be "in".

The preamble of all the dependent claims 3-10, 12, and 14 begin with the article "A", the dependent claims should read "The device according to claim..."

Appropriate correction is required.

6. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 3 is directed to the "guide means". The device of claim 1 cannot be limited by claim 3 because applicant

defines the guide means on page 4, second paragraph, as comprising the central recess 5a that is formed by the rim 5b. How can the device of claim 1 be further limited as recited in claim 3, when the recess (which is the guide means) has already been claimed as an element of the invention. o/c

7. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Drawings

8. The corrected drawings were received on February 14, 2002. These drawings are accepted.

Response to Amendment

9. The amendment filed October 28, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The phrase "wherein the adapter block is structurally removable from the laboratory magnetic stirrer without removing a fastener" as recited in claim 1 is a limitation that is not recited and not adequately supported in the original specification. Applicant relies on the "Background of the Invention" as providing support for the limitation, however this portion of the specification is not considered be applicant's invention but that of prior art. There is also no recitation of the adapter block of the instant invention being removable

without removing a fastener. The specification only recites that the adapter block is effectively positioned to effectively locate the reaction vessels for stirring. This does not provide adequate support for the recitation recited with the claims. As such the previous rejections as applied to claim 1 is hereby maintained.

Claims 16, 18, and 20 also contain new matter that was not support by the original specification. The claims recite "a base portion of each vessel may be held substantially at the level of the recess", there is no specific recitation to such a characteristic of the base disclosed. There is also no mention of what level the vessels are held within the adapter block.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

10. Applicant's arguments filed October 28, 2002 have been fully considered but they are not persuasive. As discussed herein, the amendment contains new matter. As to applicants arguments as addressed to the 103 rejection of the claims as based on the combination of Landsberger and Jones, applicant recites that there is no motivation to combine the references because the references do not disclose the benefits of having the reaction vessels located on the periphery of the stirrer. While the references may not be directed to the specific benefits of having vessels located on the periphery for the purpose of applying equal magnetic forces. The motivation to combine the references is to modify the device of Landsberger to be used in the method of supplying reactants as recited by Jones. It is obvious that in order to perform the stirring that the reactants must first be placed in the reaction vessels. As taught by Jones, the reactants can be

supplied automatically by a pipette that extends to the periphery of the turntable where the vessels are located at an equal distance from the center of the turntable. This arrangement allows for the reaction tubes to be effectively filled by the apparatus without altering the position of the tubes. (column 1 lines 57-66). Although it is not specifically disclosed in the prior art, such a modification of the device would achieve the benefits of the magnetic stirring as claimed by applicant. As such the previous 103 rejections are hereby maintained.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The phrase "wherein the adapter block is structurally removable from the laboratory magnetic stirrer without removing a fastener" as recited in claim 1 is a limitation that is not recited and not adequately supported in the original specification. Applicant relies on the "Background of the Invention" as providing support for the limitation, however this portion of the specification is not considered be applicant's invention but that of prior art. There is also no recitation of the adapter block of the instant invention being removable without removing a fastener. The specification only recites that the adapter block is effectively

positioned to effectively locate the reaction vessels for stirring. This does not provide adequate support for the recitation recited with the claims.

Claims 16, 18, and 20 also contain new matter that was not support by the original specification. The claims recite "a base portion of each vessel may be held substantially at the level of the recess", there is no specific recitation to such a characteristic of the base disclosed. There is also no mention of what level the vessels are held within the adapter block.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Claims 1 and 11 recite the limitation "a recess in the base" in line 2. There is insufficient antecedent basis for this limitation in the claim. The phrase "the base" should be "a base".

16. As to claim 3, the device of claim 1 cannot be limited by claim 3 because applicant defines the guide means on page 4, second paragraph, as comprising the central recess 5a that is formed by the rim 5b. How can the device of claim 1 be further limited as recited in claim 3, when the recess (which is the guide means) has already been claimed as an element of the invention.

17. As to claim 4, it is unclear because the sockets are the fixing means and as claimed it appears as if the sockets are an element of the fixing means. ok

18. As to claim 12, it is unclear how the magnetic stirrer further comprises a hotplate operatively connected to the magnetic stirrer. It appears as if applicant's intention is claim a combination of a magnetic stirrer comprising a hotplate and a condenser connected to the adapter block fitted on the magnetic stirrer.

19. As to claim 13, it is unclear how the magnetic stirrer further comprises a condenser unit. It appears as if applicant's intention is claim a combination of a magnetic stirrer a condenser connected to the adapter block fitted on the magnetic stirrer. The condenser unit is not an element of the stirrer but is actually a unit the may be optionally used in conjunction with applicant's block as recited on page 3 of the specification.

20. Claims 17 and 19 are redundant claims for the "holders" are equivalent to the "sockets" of claims 1 and 11.

21. Claims 11 and 13 recite the limitation "each and every socket". There is insufficient antecedent basis for this limitation in the claim. The examiner understands from page 4 of the specification that the fixing means is the sockets. It is suggested that applicant amend the claims to recite "fixing means in the form of a plurality of sockets for holding a plurality of reaction vessels....." in order to provide the antecedent basis.

22. Claim 14 recites the limitations "the base" in line 2. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

23. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

24. Claims 1-5, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by A. R. Jones 3,594,129.

The analyzer of Jones comprises a turntable (adapter block) that has a series of openings (fixing means) 16 in a ring (guide means) 17 on its periphery for holding vessels 18. The turntable rotates above the platform which it is fitted via a recess (see figures). The vessels may be rotated to an appropriate position to allow the dispensing of a reagent into the vessel to allow for the observation of a reaction.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

26. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

27. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

28. Claims 1-5, 7-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsberger, US Patent 3,356,346 in view of A. R. Jones 3,594,129.

Landsberger discloses a test tube stirring block for use in combination with a stirring machine. The support block 10 is made of vinyl material which allows it to hold a plurality of test tubes 12 (of any size) in apertures 20 (sockets) located about the perimeter of the circular block 10. While the fluid is in the test tubes it is stirred by a stirring magnet 26 that is attracted and repelled by conventional means such as a magnetic stirring machine. As seen in Figure 1 the test tubes are automatically guided into the appropriate position for stirring as they are placed within the apertures.

Landsberger does not disclose that adapter block is chemical resistant and each vessel is located in a position around the periphery of the recess.

The analyzer of Jones comprises a turntable (adapter block) that has a series of openings (fixing means) 16 in a ring (guide means) 17 on its periphery for holding

vessels 18. The turntable rotates above the platform which it is fitted via a recess (see figures). The vessels may be rotated to an appropriate position to allow the dispensing of a reagent into the vessel to allow for the observation of a reaction.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Landsberger by incorporating the teachings of Jones in order to allow the block (turntable) to have the vessels located outside the periphery of the recess in order to allow the block to rotate to a position to allow liquid to be dispensed in the vessels for mixing and observing the reactions.

As to claim 7, it is obvious that all materials conduct heat to some extent. However, it is also well known in the art and conventional for magnetic stirrers to incorporate hotplates which conduct heat to the samples being stirred. Therefore, it would have been obvious to one of ordinary skill in the art to modify the device by fabricating the block or holder of a conductive material to allow for simultaneous heating and stirring.

29. Claims 6, 10, and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over over Landsberger, US Patent 3,356,346 in view of A. R. Jones 3,594,129 as applied to claims 1-5, 7-9 and 11 above, and further in view of Baker 97/09353.

The modified teachings of Landsberger in view of Jones do not disclose that the device incorporates a gas manifold/condenser.

Baker however discloses a synthesis block in which vessels may be placed and heated to the desired reaction temperature. The device comprises a temperature

control block 18 (gas manifold) that incorporates a gas inlet for heating and cooling water inlet and outlet (condenser) to allow for the optimum heating and cooling of the chemical reagents in the vessels.

It would have been obvious to one of ordinary skill the art to modify the modified hotplate stirrer of Landsberger in view of Jones by also incorporating the heating and cooling system of Barker to allow for optimum control of the heating and cooling of the reagents contained in the vessels of the block.

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamasaki et al. discloses reaction device with magnetic stirring.

Baxter discloses a turntable mixer.

Fletcher discloses an orbital shaker.

Ohishi et al. discloses a mixing apparatus.

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is (703) 305-0399. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7719 for regular communications and (703) 305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

brg
January 2, 2003

Jill Warden
Supervisory Patent Examiner
Technology Center 1700